What is claimed is:

1. In the forming of copper interconnects for an integrated circuit, a method for dissociating copper oxides from copper surfaces, comprising the steps of:

providing a substrate with an insulating layer formed over said substrate;

forming an interconnect pattern in said insulating layer;

conformally depositing a barrier layer along said interconnect pattern;

forming copper interconnects in said interconnect pattern ; and

providing a supercritical fluid over said copper interconnect pattern in said insulating layer.

2. The method of claim 1, wherein treating the supercritical fluid comprises changing the oxidation state of copper to dissociate the copper oxides from the copper surfaces.

3. The method of claim 1, further comprising providing a supercritical fluid selected from the group consisting of oxidizing agents and reducing agents, and changing the oxidation state of the metal with the supercritical fluid.

4. The method of claim 1, further comprising the step of baking an antireflective coating layer, whereby said antireflective coating layer is removed.

5. The method of claim 4, wherein said baking step is at a temperature between about 350-400°C for about 30-60 seconds.

6. The method of claim 1, wherein said barrier layer is deposited using plasma enhanced chemical vapor deposition, thermal chemical vapor deposition or atomic layer deposition.

7. The method of claim 1, wherein said insulating layer includes a low-k dielectric material.

8. The method of claim 1, wherein said barrier layer includes a dielectric material.

9. The method of claim 8, wherein said barrier layer includes a dielectric material selected from the group consisting of SiC, SiCN, SiCO and SiN.